

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1059139

Luminaire Tested: S123RDR-S1165D935-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059139
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-30)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDR-S1165D935-X4F0-XX-UDD-BVL-B
Description: DEFINE 3 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

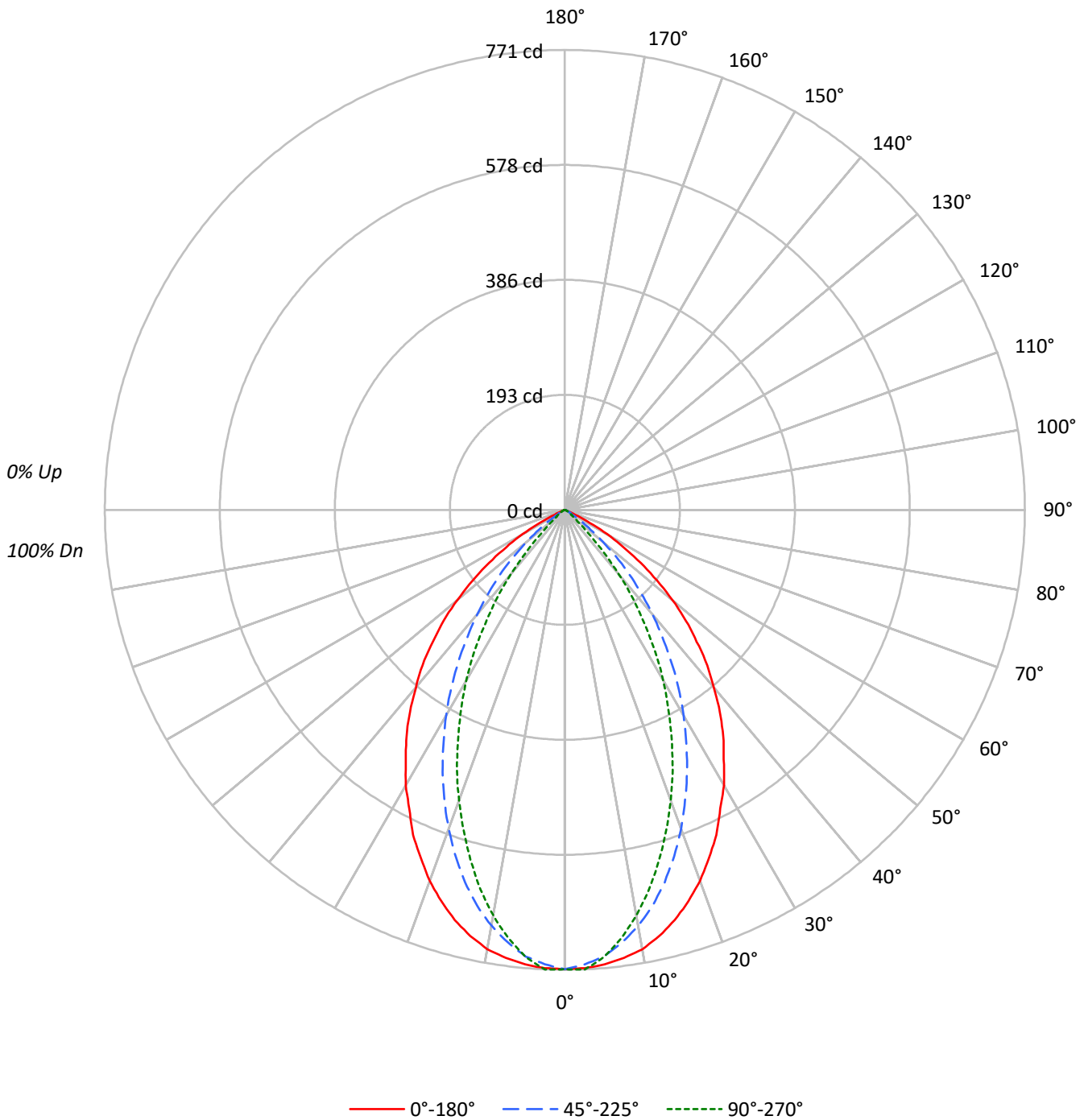
Lumens per Lamp: N/A
Luminaire Lumens: 878.7 lumens
Efficiency: N/A
Efficacy: 21.0 lumens/watt
Spacing Criteria (0/90/45): 1.06 / 0.81 / 0.94
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 41.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

TEST NUMBER: P1059139

CATALOG NUMBER: S123RDR-S1165D935-X4F0-XX-UDD-BVL-B

Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	113	110	107	104	110	107	105	103	103	101	100	100	98	97	96	95	94	92
2	106	101	96	92	104	99	95	91	96	92	89	93	90	87	90	87	85	84
3	100	92	87	82	98	91	86	82	88	84	80	86	82	79	83	80	78	76
4	94	85	79	74	92	84	78	74	82	77	73	80	75	72	78	74	71	69
5	88	79	72	67	86	78	71	67	76	70	66	74	69	65	72	68	65	63
6	83	73	66	61	81	72	66	61	70	65	60	69	64	60	67	63	60	58
7	78	68	61	56	77	67	60	56	66	60	56	64	59	55	63	58	55	53
8	74	63	56	52	72	62	56	51	61	55	51	60	55	51	59	54	51	49
9	70	59	52	48	68	58	52	48	57	52	47	56	51	47	55	51	47	46
10	66	55	49	44	65	55	48	44	54	48	44	53	48	44	52	47	44	42

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9043	9043	9043
5°	9018	8858	8872
10°	8916	8443	8236
15°	8653	7854	7402
20°	8275	7113	6478
25°	7792	6283	5479
30°	7230	5398	4473
35°	6631	4462	3324
40°	5949	3498	2129
45°	5189	2554	885
50°	4304	1518	340
55°	3173	635	254
60°	1921	233	146
65°	517	139	69
70°	0	41	41
75°	0	0	54
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5189 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	70.9	8.1
10°-20°	183.0	20.8
20°-30°	228.0	25.9
30°-40°	203.9	23.2
40°-50°	128.7	14.6
50°-60°	53.8	6.1
60°-70°	10.1	1.2
70°-80°	0.3	0.0
80°-90°	0.0	0.0
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	481.9	54.8
0°-40°	685.8	78.0
0°-60°	868.3	98.8
0°-90°	878.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	878.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	770	770	770	770	770	
5°	765	764	752	754	753	72
15°	712	694	646	619	609	200
25°	601	553	485	443	423	275
35°	463	396	311	256	232	288
45°	312	243	154	82	53	241
55°	155	107	31	12	12	139
65°	19	14	5	2	2	26
75°	0	0	0	0	1	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	770.1	770.1	770.1	770.1	770.1
2.5°	768.9	770.1	762.7	770.1	771.3
5°	765.1	763.9	751.5	754.0	752.7
7.5°	757.7	754.0	731.7	726.7	724.2
10°	747.8	737.9	708.1	695.7	690.7
12.5°	731.7	718.0	679.6	659.7	652.3
15°	711.8	694.5	646.1	618.8	608.9
17.5°	688.2	663.4	608.9	579.1	564.2
20°	662.2	627.5	569.2	533.2	518.4
22.5°	631.2	592.8	527.0	488.6	472.5
25°	601.4	553.1	484.9	442.7	422.9
27.5°	564.2	513.4	440.2	396.8	375.7
30°	533.2	475.0	398.1	349.7	329.9
32.5°	496.0	435.3	354.7	301.3	282.7
35°	462.6	395.6	311.3	255.5	231.9
37.5°	426.6	357.1	267.9	209.6	187.3
40°	388.1	318.7	228.2	163.7	138.9
42.5°	353.4	280.3	188.5	121.5	96.7
45°	312.5	243.1	153.8	81.8	53.3
47.5°	275.3	208.3	116.6	45.9	28.5
50°	235.6	172.4	83.1	23.6	18.6
52.5°	194.7	137.6	54.6	16.1	14.9
55°	155.0	106.6	31.0	12.4	12.4
57.5°	116.6	76.9	16.1	9.9	8.7
60°	81.8	50.8	9.9	7.4	6.2
62.5°	47.1	29.8	7.4	5.0	5.0
65°	18.6	13.6	5.0	2.5	2.5
67.5°	1.2	3.7	2.5	1.2	1.2
70°	0.0	0.0	1.2	1.2	1.2
72.5°	0.0	0.0	1.2	1.2	1.2
75°	0.0	0.0	0.0	0.0	1.2
77.5°	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)